



## U.S. EPA's National Beach Conference

March 15–17, 2011

Miami, Florida

### Agenda

#### **Monday, March 14, 2011 (Pre-conference Meetings and Activities)**

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##### *Hibiscus Room and Promenade*

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| <b>8:00–6:00</b>   | <b>Registration</b>   |
| <b>8:00–10:00</b>  | <b>Beach Monitoring 101 for State or Local Beach Managers</b> |
| <b>10:00–12:00</b> | <b>Introduction to Rapid Methods</b>                          |
| <b>1:00–6:00</b>   | <b>Predictive Tools Forum</b>                                 |
| <b>1:00–6:00</b>   | <b>Rapid Methods “Hands-on Lab”</b>                           |

#### **Tuesday, March 15, 2011**

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##### *Regency Ballroom*

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| <b>7:00–5:00</b>   | <b>Registration</b>  |
| <b>7:30–9:30</b>   | <b>Continental Breakfast Sponsored by BioGX, Inc.</b>  |
| <b>8:00–9:30</b>   | <b>Session I: Welcome Speakers</b>   |
| 8:00–8:20          | EPA Welcome<br><i>Nancy Stoner, U.S. EPA Office of Water</i>   |
| 8:20–8:40          | Local Welcome<br><i>Samir Elmir, Miami Dade County Health Department</i>   |
| 8:40–9:10          | Rapid Methods for Beach Water Quality Monitoring: Public Health Perspectives during a California Demonstration Project<br><i>Larry Honeybourne, Orange County Health Care Agency</i> |
| <b>9:10–10:00</b>  | <b>BREAK</b>   |
| <b>10:00–11:45</b> | <b>Session II: How is Beach Program Policy Evolving?</b><br><b><i>Session Chair: John Wathen, U.S. EPA Office of Science and Technology</i></b>                                      |
| 10:00–10:20        | EU Bathing Water Profiles in Scotland<br><i>Calum McPhail, Scottish Environment Protection Agency</i>  |
| 10:20–10:40        | Meeting Coming Challenges in BEACH Act Monitoring and Notification Programs<br><i>Denise Hawkins, U.S. EPA Office of Science and Technology</i>                                      |

- 10:40–11:00 A New Approach to Beach Tiering in Beach Monitoring and Notification Programs  
*John Wathen, U.S. EPA Office of Science and Technology*
- 11:00–11:20 EPA's Current Thinking on Development of New Recreational Water Criteria  
*Grace Robiou, U.S. EPA Office of Science and Technology*
- 11:20—11:45 Panel Discussion

**11:45–1:15 LUNCH (on your own)**

**1:15–3:00 Session III: How is Beach Management Evolving in a Time of Changing Priorities and Policies?**

***Session Chair: David Polk, Florida Department of Health***

- 1:15–1:35 Proposed Coastal Environmental Health Landing Page—An SC EPHT Project  
*Fran Marshall, South Carolina Department of Health and Environmental Control*
- 1:35–1:55 Coastal Pathogen Efforts of the Gulf of Mexico Alliance  
*Christopher Sinigalliano, National Oceanic and Atmospheric Administration*
- 1:55–2:15 California's Clean Beach Initiative: Is It Working?  
*Amanda Griesbach, Heal the Bay*
- 2:15–2:35 Implementing the Great Lakes Restoration Initiative: A Beach Manager's View  
*Cathy Breitenbach, Chicago Park District*
- 2:35–3:00 Panel Discussion

**3:00–3:30 BREAK**

**3:30–5:15 Session IV: How Do We Reach the Beachgoing Public with the Best Information?**

***Session Chair: John Heffelfinger, U.S. EPA Office of Policy***

- 3:30–3:50 Assessing the Effectiveness of the BEACH Act Notification Program  
*Tracy Dyke-Redmond, Industrial Economics, Inc.*
- 3:50–4:10 Communicating Recreational Water Quality  
*Preethi Pratap, University of Illinois at Chicago, School of Public Health*
- 4:10–4:30 The Use of Social Media Tools and Volunteer Programs to Notify the Public and Maximize Benefits of Washington State's Swimming Beach Program  
*Jessica Archer, Washington State Department of Ecology*
- 4:30–4:50 Improving Health Risk Communication: The Need for a National Beach Report Card  
*Mark Gold, Heal the Bay*
- 4:50–5:15 Panel Discussion

**Wednesday, March 16, 2011**

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***Regency Ballroom***

**7:30–4:00**      **Registration**

**7:30–9:30**      **Continental Breakfast Sponsored by AbTech Industries, Inc.**

**8:00–9:45**      **Session V: Epidemiological Studies: What Does the Science Tell Us?**  
***Session Chair: Tim Wade, U.S. EPA Office of Research and Development***

8:00–8:20      Indicators of Water Quality and Health Effects at a Tropical and a Runoff Impacted Beach  
*Tim Wade, U.S. EPA Office of Research and Development*

8:20–8:40      Rapid Indicators for Enterococcus and the Risk of Illness after Exposure to Urban Runoff Contaminated Marine Water: Results from a “Natural Experiment”  
*Jack Colford, University of California, Berkeley, School of Public Health*

8:40–9:00      The BEACHES Study 1: Health Effects from Non-point Source Microbial Contaminants in Subtropical Recreational Marine Waters  
*Lora Fleming, University of Miami*

9:00–9:20      Comparing Swimming-related Illness Associations with Fecal Indicators Quantified by qPCR and Culture-based Methods at a Freshwater Beach  
*Jiyoung Lee, Ohio State University*

9:20–9:45      Panel Discussion

**9:45–10:15**      **BREAK**

**10:15–12:00**      **Session VI: Other Rapid Methods and Alternative Indicators: What Else is Out There?**  
***Session Chair: John Griffith, Southern California Coastal Water Research Program***

10:15–10:35      Examining the Range of Rapid Testing Approaches Available for Beach Water Quality Testing  
*Rachel Noble, University of North Carolina–Chapel Hill*

10:35–10:55      Performance Criteria and Field Testing of qPCR Methods for Human-associated Microbial Source Tracking Markers and Fecal Indicator Bacteria in Fresh and Salt Surface Waters  
*Valerie Harwood, University of South Florida*

10:55–11:15      Out of the Lab and into the Ocean: Remote Detection of Fecal Indicators Using In Situ Real-time PCR  
*Kevan Yamahara, Stanford University, Center for Ocean Solutions*

11:15–11:35      Improving Prediction of Illness in Swimmers with Alternative Statistical Estimators and Combinations of Traditional and Novel Indicators  
*Vincent Yau, University of California, Berkeley*

11:35–12:00      Panel Discussion

**12:00–1:30**      **LUNCH (on your own)**

<b>1:30–3:15</b>	<b>Session VII: What Are the Roles of Sanitary Surveys and Source Tracking?</b> <b>Session Chair: Shannon Briggs, Michigan Department of Natural Resources and Environment</b>
1:30–1:50	Variation of Nearshore Water Quality in the Presence of Transient Sources <i>Adrian Koski, Racine Health Department</i>
1:50–2:10	Municipal Guide to Clean Water: Conducting Sanitary Surveys to Improve Coastal Water Quality <i>Keri Lindberg, University of Maine Cooperative Extension</i>
2:10–2:30	Global Inter-lab Fecal Source Tracking Methods Comparison Study <i>Orin Shanks, U.S. EPA</i>
2:30–2:50	Comprehensive Beach Sanitary Survey in Wisconsin <i>Greg Kleinheinz, University of Wisconsin Oshkosh</i>
2:50–3:15	Panel Discussion
<b>3:15–3:45</b>	<b>BREAK</b>
<b>3:45–5:30</b>	<b>Session VIII: How Do We Use Quantitative Microbial Risk Assessment to Develop Site-specific Criteria?</b> <b>Session Chair: Jeff Soller, Soller Environmental</b>
3:45–4:05	Use of QMRA to Evaluate Recreational Water Risks from Human and Non-human Sources <i>Jeff Soller, Soller Environmental and Nick Ashbolt, U.S. EPA</i>
4:05–4:25	Monitoring of Human Pathogens and Source Identifiers in Discharges Across the United States: QMRA from Source to Bathing Site <i>Stefan Wuertz, University of California–Davis and Graham McBride, National Institute of Water and Atmospheric Research</i>
4:25–4:45	Protect Public Health, Use Good Science, Lesser Cost—Can We Pick 3? <i>Jan Mandrup-Poulsen, Florida Department of Environmental Protection</i>
4:45–5:30	Panel Discussion
<b>6:00–8:00</b>	<b>Poster Session (Promenade)</b>

Thursday, March 17, 2011

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***Regency Ballroom***

**7:30–1:00**      **Registration**

**8:00–9:45**      **Session IX: How Do Rapid Methods Fit into the Larger Clean Water Act Paradigm?**

***Session Chair: Joel Hansel, U.S. EPA Region 4***

8:00–8:20      Application of Molecular Microbial Source Tracking to Monitor Recreational Water Quality Improvements of Residential Canals in the Florida Keys  
*David Wanless, University of Miami, Cooperative Institute for Marine and Atmospheric Studies*

8:20–8:40      Pick an Indicator, Any Indicator: Implications for 303(d) Listings, TMDLs, and Clean Water Act Compliance  
*Dustin Bambic, AMEC Earth & Environmental, Inc.*

8:40–9:00      The Clean Water Act—Beyond BEACHES and TMDLs  
*Joel Hansel, U.S. EPA Region 4*

9:00–9:45      Panel Discussion

**9:45–10:15**      **BREAK**

**10:15–12:00**      **Session X: How Can Predictive Tools Complement Beach Monitoring Programs?**

***Session Chairs: Richard Whitman, U.S. Geological Survey and David Rockwell, University of Michigan***

10:15–10:35      Spectral Multiple Linear Regression: An Approach for Modeling Decadal and Shorter Period Fluctuations in Water Quality at Ocean Beaches  
*Stanley Grant, University of California—Irvine*

10:35–10:55      Development of Predictive Models to Aid Beach Management at Toronto (Canada) Public Beaches  
*Diane Mas, Fuss & O'Neill, Inc.*

10:55–11:15      Methodologies to Complement the Direct Application of MLR Model Development  
*Walter Frick*

11:15–11:35      Are Applications of Swimming Water Quality Criteria Overly Conservative?  
*Richard Whitman, U.S. Geological Survey and Meredith Nevers, U.S. Geological Survey*

11:35–12:00      Panel Discussion

**12:00–1:30**      **LUNCH (on your own)**

**1:30–3:15**      **Session XI: Implementing New Methods: How Can We Meet the Challenge?**

***Session Chair: Julie Kinzelman, Racine Department of Health***

1:30–1:50      Implementation of Nowcast Predictive Models  
*Donna Francy, U.S. Geological Survey*

1:50–2:10      Establishment of Regional Rapid Testing Laboratories throughout Wisconsin  
*Greg Kleinheinz, University of Wisconsin Oshkosh*

2:10–2:30 Comparative Evaluation of Molecular and Culture Methods for Fecal-indicator Bacteria in Geographically-distributed Recreational Inland Waters  
*Rebecca Bushon, U.S. Geological Survey*

2:30–3:15 Panel Discussion

**3:15–3:45**

**BREAK**

**3:45–5:30**

**Session XII: Putting it All Together: Where Do We Go from Here?**

***Session Chair: Alexandria Boehm, Stanford University***

Panelists:

- Alexandria Boehm, Stanford University
- Samir Elmir, Miami Dade County Health Department
- Mark Gold, Heal the Bay
- Larry Honeybourne, Orange County Health Care Agency
- Julie Kinzelman, Racine Department of Health
- David Polk, Florida Department of Health
- Grace Robiou, U.S. EPA Office of Science and Technology
- Helena Solo-Gabriele, University of Miami